REMARKS

Attached hereto is a marked-up version of the changes made to the application by the present Amendment. If clarification of the amendment or application is desired, or if issues are present which the Examiner believes may be quickly resolved, the Examiner is invited to initiate a telephone interview with the undersigned attorney to expedite prosecution of the present application.

If there are any additional fees resulting from this communication, please charge same to our Deposit Account No. 18-0160, our Order No. WLL-12659.

Respectfully submitted,

RANKIN, HILL, PORTER & CLARK LLP

By: _____
David E. Spaw, Reg. No. 34732

700 Huntington Building
925 Euclid Avenue
Cleveland, Ohio 44115-1405
(216) 566-9700
Customer No. 007609

Attachment: Marked-up version of Amendments

IN THE CLAIMS:

The claims have been amended as follows:

1. (Amended) ~~[Electric]~~ An electric drive system operated with muscle-power (1) for a vehicle (2) and/or a stationary training apparatus (3) with a foot pedal (5) and a generator (6) mechanically connected with the foot pedal, with an electric transmission (4) from the generator (6) to an electric consumer (10) and/or to a drive motor (11) as well as with an electric control system (20), ~~[characterised in that]~~ wherein the electric control system comprises a control program (21) of the generator (6), with which a counter moment GM on the generator, related to the forwards ~~[pedalling]~~ pedaling direction v is generatable,

~~[-]~~wherein the drive system, as a vehicle drive with counter moment~~[:]~~, comprises a starting control (22) of the generator, with which, when the foot pedal is actuated from standstill, an immediately occurring pedal resistance TW is generated and with which a high starting moment MA is generated at the foot pedal when starting from standstill up to a minimum riding speed,

~~[-]~~and wherein the drive system, as a drive with counter moment for a stationary training apparatus (3)~~[:]~~, comprises a motor operation control (23) with a bidirectional converter (31), with which the generator (6) is also operatable as a motor, with controllable coupling and uncoupling of electric power.

2. (Amended) ~~[Drive]~~ The drive system in accordance with claim 1, ~~[characterised in that]~~ wherein the standstill pedal resistance TW corresponds to an actuation force F on the foot pedal (5) of at least 200 N.

3. (Amended) ~~[Drive]~~ The drive system according to ~~[one of the preceding claims, characterised in that]~~ claim 1, wherein the starting moment MA at the foot pedal amounts to at least 40 Nm.

4. (Amended) ~~[Drive]~~ The drive system in accordance with ~~[one of the preceding claims, characterised in that with]~~ claim 1, wherein the starting control (22) of the generator ~~[the starting of the generator]~~ is controlled ~~[in]~~ such ~~[a manner,]~~ that the starting acceleration of the foot pedal (bmax) on average amounts to a maximum of 4 rad/sect.

5. (Amended) ~~[Drive]~~ The drive system according to ~~[one of the preceding claims, characterised in that]~~ claim 1, wherein the resistance or load moment (M1) of the generator is modulated in phase with the pedal angle (W1).

6. (Amended) ~~[Drive]~~ The drive system in accordance with ~~[one of the preceding~~

~~claims, characterised in that]~~ claim 1, wherein a standstill braking (71) of the foot pedal is active, which produces a standstill pedal resistance TW and which is also effective in case the electric control system (20) is switched off.

7. (Amended) ~~[Drive]~~ The drive system according to ~~[one of the preceding claims, characterised in that]~~ claim 1, wherein the generator is short-~~[circuitable]~~ circuited by means of an electric switch (33) directly or through resistors, capacitors and coils and wherein the electric switch, in case the electric control system (20) is switched off, is closed for the generation of the pedal resistance TW.

8. (Amended) ~~[Drive]~~ The drive system in accordance with claim 7, ~~[characterised in that]~~ wherein, by means of brief switching on and switching off (choppering) of the electric switch (33) during the starting, the high starting moment MA is generated.

9. (Amended) ~~[Drive]~~ The drive system according to ~~[one of the preceding claims, characterised in that the]~~ claim 1, wherein a range of the maximum efficiency of the generator (6) corresponds to a normal range of the ~~[pedalling frequency, which in preference amounts to 50 - 100 rpm.]~~ pedaling frequency, said normal pedaling frequency range being between about 50 - 100 rpm.

~~[10. Drive system in accordance with one of the preceding claims, characterised in that]~~ 10. (Amended) The drive system according to claim 1, wherein the generator control program (21) comprises several moment characteristics (M60, M120), which are able to be changed over between, and which increase within, a normal range of the ~~[pedalling]~~ pedaling frequency.

11. (Amended) ~~[Drive]~~ The drive system according to ~~[one of the preceding claims, characterised in that]~~ claim 1, wherein, to the foot pedal (5) and to the generator (6), electrical, mechanical or fluid brakes (45), such as braking resistors, eddy current brakes, friction brake pads, gas - and fluid damping elements or mechanical storage devices (46), such as spring-power storage devices or gas - and liquid storage devices are assigned.

12. (Amended) ~~[Drive]~~ The drive system in accordance with ~~[one of the preceding claims, characterised in that]~~ claim 1, wherein a blockable free-wheel system (42) or a switchable clutch (43) is provided between the foot pedal and the generator.

13. (Amended) ~~[Drive]~~ The drive system according to ~~[one of the preceding claims, characterised in that]~~ claim 1, wherein the drive system comprises modular units ~~[such as]~~, said modular units being selected from the group consisting of a pedal generator module (8) with foot pedal (5), generator (6), a possible speed transmission (7) and generator control system (20.1), a control module (20) and a drive motor module (18) with motor (11), a possible speed reduction transmission (12) and a motor control system (20.2).

14. (Amended) ~~[Drive]~~ The drive system in accordance with ~~[one of the preceding claims, characterised in that]~~ claim 1, wherein electric storage devices (14), and in particular a super capacitor (15) (super cap), are provided as short-term storage devices.

15. (Amended) [~~Drive~~] The drive system according to [~~one of the preceding claims, characterised in that~~] claim 1, wherein two differently designed motors, (11a, 11b) each respectively for higher and a lower speed range, or a motor with switched windings is provided.

16. (Amended) [~~Drive system in accordance with one of the preceding claims, characterised in that~~] The drive system according to claim 1, wherein operating data, such moments or torques, powers and revolutions per min on the foot pedal are recorded and indicated.

17. (Amended) [~~Drive~~] The drive system according to [~~one of the preceding claims, characterised in that~~] claim 1, wherein an interface (35) is provided for [~~the connection of~~] connecting external devices.

18. (Amended) [~~Drive~~] The drive system in accordance with [~~one of the preceding claims, characterised in that~~] claim 1, wherein a removable data storage device (29) is provided, which when it is removed carries out a closing function of the system.

19. (Amended) [~~Drive~~] The drive system according to [~~one of the preceding claims, characterised in that~~] claim 1, wherein the electric circuit comprises operating programs (24), resp., driving riding programs (25) for the [~~utilisation~~] utilization in training apparatuses, resp., vehicles.

20. (Amended) [~~Drive~~] The drive system in accordance with [~~one of the preceding claims. characterised in that~~] claim 1, wherein the electric control [ ]system (20) after a selectable time interval, during which no [~~travelling~~] traveling motion takes place, goes over into an inoperative or idle condition and/or the pedal is moved to a desired starting position.

21. (Amended) [~~Drive~~] The drive system according to [~~one of the preceding claims, characterised in that~~] claim 1, wherein the foot pedal (5)[~~, resp., the muscle-powered drive~~] comprises a changeable geometry.

22. (Amended) [~~Vehicle~~] A vehicle with a drive system in accordance with [~~one of the claims 1 - 21.~~] claim 1.

[~~23. Training~~] 23. (Amended) A training apparatus with a drive system according to [~~one of the claims 1 - 21.~~] claim 1.

IN THE ABSTRACT:

The Abstract of the Disclosure has been amended as follows:

[~~Abstract~~] Abstract of the Disclosure

[~~The~~] An electric drive system (1) operated by muscle power [~~comprises~~] includes a foot pedal (5) and a mechanical generator (6) mechanically connected to [~~it mechanically,~~] the foot pedal. The drive system also includes an electric transmission (4) and an electric control system (20) with a control program (21) of the generator, which is able to generate a counter or load moment GM. [~~In~~] When used in a vehicle (2), the drive system [~~comprises~~] also includes a starting control system (22) for the generator, by means of which a standstill pedal resistance TW and a high starting moment MA is produced at the foot pedal. [~~Utilised~~] When used in a stationary training apparatus (3), the drive system [~~comprises~~] includes a motor operation control system (23) with a bi-directional converter (31), by means of which the generator is also able to be operated as a motor.

[~~(Figure 1)~~]